

DERAEOCORIS BREVIS FEEDING OBSERVATIONS.

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A small, blackish bug, *Deraeocoris brevis* Uhler, was observed to be feeding on an *Erythroneura* nymph on Virginia creeper at Logan, on the Utah State Agricultural College Campus, August 23, 1933. Examination showed the creeper foliage to be heavily infested and being seriously damaged by the leafhoppers, *Erythroneura ziczac* Walsh, and nymphs. *Deraeocoris brevis* also was present in moderate abundance.

One of the predators was brought into the laboratory and placed in a two-dram homeopathic vial with 8 nymphs of *E. ziczac* and kept under constant observation under a wide-field binocular microscope. Within five minutes the predator had captured a fifth-instar nymph, the prey being seized by means of the prothoracic tarsi of the predator. The feeding stylets than were inserted through the dorso-lateral suture between the head and prothorax of the nymph. After four minutes of feeding the mouth parts were withdrawn and re-inserted through the left wing-pad. The predator stylets next were inserted into the left side of the nymphal leafhopper's head on the dorsal side. After feeding at this point for five minutes the nymph had the appearance of being partially translucent, as though air was taking the place of the normal body fluids. For two minutes the predator probed about, inserting its stylets into various parts of the victim's body, each time withdrawing these structures after a few seconds.

At this point a second *ziczac* nymph walked near the predator. This nymph was quickly seized by the prothoracic tarsi of the predator which soon was feeding through a puncture made at the apex of the nymphal head. After six minutes of feeding at this point, the leafhopper nymph was discarded and a third nymph captured and fed upon for three minutes, through a puncture on the dorsum of the victim's abdomen. At this time the feeding process shifted to the dorsum of the mesothorax where it continued for nine minutes. The next feeding was conducted for four minutes at the inner margin of the right eye. Using its prothoracic tarsi, the *Deraeocoris brevis* would shift its prey for changes in feeding position, which during a period of five minutes occurred through the right wing pad, thorax, then the abdomen.

After one minute of rest the predator quickly grasped a fourth large nymphal victim, feeding through a ventral puncture at the

suture between metathorax and abdomen. After feeding in this position for seven minutes the predator probed around restlessly, then fed for eleven minutes through a puncture in the left wing pad, until the body of the nymph had a bluish, translucent appearance under the microscope. After three minutes of restless probing about and short time feeding, the body of the prey was discarded. A fifth *Erythroneura* nymph was seized within a few seconds and fed upon for nine minutes: this victim then was discarded. Observations were discontinued at this time, the single mirid predator, *Deraeocoris brevis*, having fed on and killed five large *Erythroneura siczac* nymphs within total elapsed time of one and one-half hours. When abundant, this species evidently is an important predator of *Erythroneura siczac*.

An adult *Deraeocoris brevis* was observed to feed on a nymphal aphid, *Prociphilus fraxinifolia* (Riley), in heavily infested rolled leaf of ash tree at Smithfield; another fed on a winged *Eriosoma americana* Riley at Hyrum, in Utah.

A Minute on Ampulex Jurine, 1807 (Hymenoptera, Sphecidae).—In my catalogue of the generic names of the Sphecoid wasps, I stated (1937, Mem. Amer. Ent. Soc., no. 9, p. 7) that Shuckard in 1837 (Essay Indig. Fossor. Hymen., p. 18) fixed the common European species *Ampulex fasciata* Jurine, 1807, type of the generic name *Ampulex* Jurine, 1807. Recently, however, I have discovered that Audouin fifteen years earlier (1822, Dict. Class. Hist. Nat., I, p. 301) validly designated *Chlorion compressum* F. [i.e., *Sphex compressa* Fabricius, 1781 = *Ampulex* (*Ampulex*) *compressa* (Fabricius)] type of *Ampulex* Jurine. *Lorrheum* Leach, 1837 and *Chlorampulex* Saussure, 1892 also have the same genotypic species and must therefore be recorded as absolute synonyms of Jurine's name.—V. S. L. PATE, Ithaca, N. Y.